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Id.

[FN43]. These conditions might include flooding, leaks, drips, HVAC problems, etc.

[FN44]. The sense of smell may also be used to detect a mold problem. Certain odors may be an indication of the presence of significant amounts of mold. For example, see *Meredith Miller v. Lakeside Village Condominium Association, Inc.*, 1 Cal. App. 4th 1611, 2 Cal. Rptr. 2d 796 (1991) (musty smell in condominium unit led to search for mold). Various molds emit low molecular weight compounds. Daniel Karpea, What Occupants Smell When They Say, 'My building Stinks!' 15 Air Conditioning, Heating & Refrigeration News, (April 12, 1999) at 46. These emissions may be generated in sufficient quantity to produce objectionable smells in structures. Id.

[FN45]. The colors can include white, orange, green, brown, and black. Id.

[FN46]. Pena-Alfaro supra note 6 at 551. See Report of the Microbial Growth Task Force, American Industrial Hygiene Association at 18 (May 2001) [hereinafter "Growth Task Force"]. Areas that may receive particular attention include the floor and corners of the building.

[FN47]. Mold may begin to grow within a wall if the source of moisture is leakage through the building envelope.

[FN48]. This type of inspection is sometimes denominated "destructive testing." See *Thompson v. Fireman's Fund Insurance Company*, 2002 Cal. App. Unpub. LEXIS 6511 (2002). It may involve breaking open walls. Id.

[FN49]. The New York Department of Health has discussed the scope of visual inspections in a guidance document. The agency notes in relevant part:

Ventilation systems should be visually checked, particularly for damp filter but also for damp conditions elsewhere in the system and overall cleanliness. Ceiling tiles, gypsum wallboard (sheetrock), cardboard, paper, and other cellulosic surfaces should be given careful attention during a visual inspection. The use of equipment such as a boroscope, to view spaces in ductwork or behind walls, or a moisture meter, to detect moisture in building materials, may be helpful in identifying hidden sources of fungal growth and the extent of water damage. Id.

[FN50]. The HVAC systems are presumably evaluated as part of the general structure appraisal/inspection activities. The assessing party may need to ensure that the personnel/contractors undertaking this work are sensitive to these aspects of these systems. Further, the assessing party will need the personnel/contractors undertaking the inspection of HVAC systems to share relevant information with those conducting the environmental due diligence. Of course, the same should be true for other potential conditions that can facilitate mold growth such as faulty plumbing, leaking roofs, etc. See also *A Growing Problem*, 22 New Orleans City Business, Dec. 3, 2001 at 23 (reference to inspection of heating and ventilation systems as part of mold management program).

[FN51]. For example, is a wallboard water stain evidence of a historical release (that has since been corrected) or is the release likely to recur?

[FN52]. The principal fungi sample analysis methods include isolation of fungi by laboratory culture and microscopic examination of fungal cultures and individual fungal spores.

[FN53]. Data quality issues associated with environmental sampling are addressed to some extent in A. Dallas Wait, *Environmental Forensic Chemistry and Sound Science in the Classroom*, 12 FORDHAM ENVTL. LAW J. 293 (Spring, 2001). For example, minimum concentrations of viable aerosols in the air that can be detected varies with the type of sample device utilized.

[FN54]. The three types of air sampling described by an American Industrial Hygienists publication include: quiescent (samples are collected under normal circumstances), semi-aggressive (dust stirred up in reservoirs to stimulate normal occupant activities) or aggressive (attempt to vigorously disturb reservoirs to establish bio-contaminant source).

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[FN55]. For example, see Benjamin Diletto et al. v. Katnik Corporation, 2002 Cal. App. Unpub. LEXIS 11814 (2002) (reference to mold sampling that compared conditions in a structure and the adjacent outside environment); Jensen v. Amgen, Inc., B153798, 2003 Cal. App. LEXIS 155 (Feb. 3, 2003) *2 -*3 (reference to sampling which reflected airborne levels of mold that were lower in the building than outside).

[FN56]. Some parties may be reluctant to undertake air sampling in occupied structures. An example might be a lessor. The reluctance may be based on lessee disclosure issues. For example, the lessor might be concerned as to whether there is a common law duty to provide the results of such sampling to the lessee. In addition, there may be concerns that the lessee will misinterpret the results.

[FN57]. Different types of mold are associated with certain building materials. Also, certain types of mold require larger amounts of water to grow. Therefore, the identification of such spores may indicate that a leak or other source of water is present in the structure. For example, the fungi *S. chartarum* requires sustained wet wood or other cellulose based material to be present. Field Guide supra note 162 at 40. Other species may be found in flooding water (*Fusarium maniliforme*) or on damp wood or cellulose (*Aspergillus versicolor*). Id.

[FN58]. This raises an important question. Does or should a party gather information about occupant/tenant indoor air quality complaints as part of due diligence? A history of occupant/tenant complaints concerning the illnesses allegedly associated with the property's indoor air quality may be an important criterion in determining whether to move beyond the visual inspection. Documents regarding such complaints may be readily available.

[FN59]. Because *Stachybotrys chartarum* does not readily become airborne, swabs, bulk, and spore trap samples may be needed in addition to air samples to adequately characterize the structural presence of this mold.

[FN60]. Id. Fungal concentrations may also vary by season.

[FN61]. See Chih-Shan Li, et al., Fungus Allergens Inside and Outside the Residence of Atopic and Control Children, 50 ARCHIVES OF ENV'TL. HEALTH, Jan. 1995 at 38 (referencing studies that found significant seasonal variations of airborne fungus).

[FN62]. For example, see Rosa Codina & Richard F. Lockey, Environmental Asthma: Nine Questions Physicians Ask, 40 Consultant 66 (Jan. 1, 2002) (noting outdoor mold is the principal allergen associated with asthma in Arizona and Central Australia).

[FN63]. The need to compare inside and outside concentrations may be unique to mold. A similar comparison is obviously not necessary for non-natural substances such as asbestos. Asbestos fibers will not normally be found in the ambient air outside a structure.

[FN64]. "A universally accepted premise supported by health professionals is that the primary utility of viable sampling methods, especially those for fungi is the assessment and comparison of the bio-diversity of contaminated areas indoors to the biodiversity of uncontaminated areas indoors and to the bio-diversity outdoors". See also Benjamin Diletto et al. v. Katnik Corporation, 2002 Cal. App. Unpub. LEXIS 11814 (2002) (comparison of mold concentrations in a structure and the adjacent outside environment); "Since these are not generally accepted guidelines to follow regarding airborne fungi, indoor results must be interpreted with respect to the control samples." and Columbia Knit, Inc. v. Affiliated FM Insurance Co., Civ. No. 98-434-HU, 1999 U.S. Dist. (Aug. 4, 1999) (sampling of boxes in building indicated elevated levels of fungal concentrations compared to outside air); Bioaerosols supra note 103 at 19-12 ("If fungal concentrations indoors are consistently higher than those outdoors, then indoor sources are indicated.").

[FN65]. The placement of sampling points would presumably need to be outside the influence of the structure to ensure they are representative of the area.

[FN66]. Jerry J. Tulis & Wayne R. Thomann, Fungal Contamination and Growth in Heating-Cooling Systems, 201 AIR CONDITIONING, HEATING & REFRIGERATION NEWS, Aug. 11, 1997 at 21 (citing proposed guidelines suggesting that concentrations of mold spores in indoor air should be less than one-third of the respective outdoor

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concentration).

[FN67]. For example, see *Columbia Knit, Inc. v. Affiliated FM Insurance Co.*, Civ. No. 98-434-HU, 1999 U. S. Dist. LEXIS 66873, (Aug. 4, 1999) *3 (sampling indicated levels of mold species *Penicillium* was higher in structure than normally found outdoors); Tiffany & Bader *supra* note 130 (stating that the presence of *Stachybotrys chartarum* in a structure is an indication that mold growth is affecting the quality of indoor environments since this mold is not commonly found in the outdoors).

[FN68]. See Springston *supra* note 60 (noting that species found inside the structure should be similar to those found outside).

[FN69]. *Id.*

[FN70]. The universal presence of mold should be considered in interpreting swab or surface sample results. A discussion of this issue in the context of sampling HVAC surfaces notes in relevant part: "Accordingly, it is imperative that the mere presence of fungal spores along surfaces of the ventilation system not be incorrectly interpreted as growth. Therefore, the practice of taking swab samples of surfaces, using bulk samples, or exposing contact plates to contaminated surfaces, with subsequent incubation and laboratory analysis, must not be used for evidence of in situ growth. This practice will provide erroneous information, leading to a gross misrepresentation of actual conditions within the HVAC system, thereby often leading to unnecessary concerns and associated costly testing and remediation."

[FN71]. "Bulk samples" are collected from visibly moldy surfaces by scraping or cutting. "Surface samples" are usually collected by wiping a measured area with a sterile swab or stripping the suspect area.

[FN72]. *Id.*

[FN73]. See Joe Provy, *Fresh Air; Indoor Air*, 178 *Popular Mechanics*, Sept. 1, 2001, at 84.

[FN74]. The protection of the health of the workers performing the work is included within this objective. *Id.* Whether conditions at a facility warrant remediation is often determined by the application of standards issued by the government or a credible private organization.

[FN75]. *Id.*

[FN76]. *Id.*

[FN77]. *Id.*

[FN78]. *Id.*

[FN79]. See *Hodgson, Russ, Andrews, Woods and Goodyear, LLP v. Isolatek International Corporation, et al.*, 2002 N.Y. App. Div. LEXIS 13122 (2002) (destruction of components of two floors of a building after mold growth reoccurred in previously remediated areas).

[FN80]. See *Elementary School Building Committee of the Town of Fairfield v. Kenneth Placko, et al.*, No. CV-0203981625, 2003 Conn. Super. LEXIS 474 *1 (Feb. 21, 2003) (reference to school destroyed because of presence of mold).

[FN81]. The varying susceptibility of individuals to mold allergens renders the setting of health-based standards a challenge. See *Pena-Alfaro* *supra* note 6 at 565. Federal legislation introduced in the 107th Congress included provisions requiring the establishment of health-based mold standards. See *United States Toxic Mold Safety and Protection Act of 2002*, H.R. 5040.

[FN82]. A number of standards or policies have been issued that are relevant to, but not specifically applicable to

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mold. An example might be standards issued by ASHRAE. ASHRAE Standard 60-2001 Ventilation for Acceptable Indoor Air Quality specifies minimum acceptable ventilation rates for various buildings. ASHRAE Standard 55-1992 addresses thermal environmental conditions for human occupancy. *Id.* at 16. Ventilation air plays an important role in removing or diluting indoor air contaminants. *Id.* For example, Standard 62-2001 recommends 20 cubic feet per minute of outside air per person in an office building. *Id.* An American Institute of Hygienists Association publication provides guidelines for comparing biodiversity between the structure and outdoor environment. Field Guide *supra* note 162 at 58-59. ASHRAE is a professional organization that recommends standards addressing ventilation and associated topics.

[FN83]. A Growing Problem, *New Orleans City Business*, Dec. 3, 2001 at 23. See also Dehmler *supra* note 8 at 17. ("Preventing mold growth is the best and most cost - effective way to deal with this problem.").

[FN84]. For example, ensuring that an HVAC's pan does not overflow may be as important as complex environmental controls. Nakano *supra* note 8.

[FN85]. See What Features Are in the Learning Environment? *School Planning and Management*, May 1, 2001 at 37.

[FN86]. Lack of cleaning and maintenance of HVAC system contributes to microbial contamination. Microbiologic contaminants can be controlled through regular cleaning and maintenance of ventilation systems. Insulation of HVAC chilled water pipes can minimize sweating reducing its possible contribution to mold growth..

[FN87]. John R. Hall, Educating Business about Mold, 216 *Air Conditioning, Heating & Refrigeration News*, July 1, 2002 at 1.

[FN88]. For example, the American Society of Safety Engineers noted in commenting on proposed federal legislation: "Much of the evidence indicated that the primary cause of mold is moisture being trapped in buildings, the result of either existing construction standards not being followed or construction standards not being adequate to prevent mold." See Letter to The Honorable John Conyers, Jr., U.S. House of Representatives, from Mark D. Hansen, P.E., CSP, President, American Society of Safety Engineers, Comments on the "United States Toxic Mold Safety and Protection Act" (H.R. 5040) (Aug. 23, 2002).

[FN89]. An example of a local governmental control might be a town ordinance addressing the construction of structures in a flood zone. See *David Farnsworth, et al. v. Thomas H Harrigan*, No. CV 950373, 1999 Conn. Super. LEXIS 144 (Conn. Jan. 22, 1999) (allegation that violation of town ordinance related to building in flood zone contributed to building water damage). See also *Mondelli v. Kendell Home Corporation, et al.*, 262 Neb. 263, 631 N.W.2d 846 (2001) (homeowner cites violations of city building code as a cause of mold contamination in structure).

[FN90]. See ASTM Standards, E 2112 Enhanced Exterior Building Installations, Standardization, December 2002 at 20 (development of consensus standard for integration of external wall components to better ensure continuity of building envelope).

[FN91]. The paper in gypsum wallboard provides nourishment for mold such as *stachybotrys*. See Dolnick *supra* note 108 at 14.

[FN92]. A 2002 article cited research in the building materials industry: "He notes that the gypsum industry is working on developing new mold-resistant or moisture resistant gypsum and drywall products, but he doesn't see them coming out any time soon."

[FN93]. The need to avoid using porous materials on air stream surfaces of plenums and ducts where moisture can support growth of fungi.

[FN94]. An example of such work includes the moisture performance of various wall configurations See U.S. DEPT OF COMMERCE, TECHNOLOGY ADMINISTRATION, A COMPUTER ANALYSIS OF WALL

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CONSTRUCTIONS IN THE MOISTURE CONTROL HANDBOOK, (NISTIR 5627) (May 1995).

[FN95]. See H.E. Barney Burroughs, Filtration: An Investment in IAQ, 69 Heating, Piping, Air Conditioning, (Aug. 1997) at 55 (stating source control is the preferred technique to achieve and maintain an acceptable indoor air environment).

[FN96]. B. Checket-Hanks, IAQ at the Rooftop Level, 215 Air Conditioning, Heating & Refrigeration News, No. 5, Jan. 28, 2002 at 9. (referencing study of effectiveness of UVC unit on fungal contamination in Tulsa, Oklahoma office building). This discussion of active technologies is not intended to be exhaustive. Various systems designed to address indoor air pollutants include, but are not limited to, ozone purification, ozone generators and duct encapsulation.

[FN97]. An example is the high energy particulate arrestor. This device was developed over fifty years as part of the Manhattan project. It was designed to control very small particles. See Burroughs, *supra* note 264 at 55.

[FN98]. However, this statement does not include filtration that is a component of ventilation systems. Some percentage of fungal spores are removed by these filtration systems. *Id.*

[FN99]. *Id.* (referencing mini plant filters, electric media, and active particle fabrics).

[FN100]. For example, see Benik v. Brandon Hatcher, 358 Md. 507, 750 A.2d 10 (2000) (reference to alleged breach of warranty due to violation of local housing codes addressing lead-based paint).

[FN101]. *Id.*

[FN102]. *Id.*

[FN103]. HR 5040, 107th Cong. (2002). The Toxic Mold and Safety Protection Act is also known as the Melina Bill.

[FN104]. HR 5040, 107th Cong. § 102 (2002). The study was to have included information about harmful and/or toxic strains of mold; methods of detecting harmful and/or toxic mold; potential dangers of exposure to mold; information on when mold becomes harmful to human health; and the hazards involved in mold remediation.

[FN105]. HR 5040, 107th Cong. § 103 (2002).

[FN106]. *Id.*

[FN107]. *Id.*

[FN108]. HR 5040, 107th Cong. § 201 (2002). The EPA, CDC, NIH, and HUD would be required to sponsor public education programs that increase awareness of the dangers of indoor mold growth and toxic mold.

[FN109]. HR 5040, 107th Cong. § 202 (2002).

[FN110]. *Id.*

[FN111]. HR 5040, 107th Cong. (2002).

[FN112]. HR 5040, 107th Cong. § 203 (2002). These procedures include giving mold information pamphlets to tenants, mold inspections, and abatement of identified indoor mold hazards.

[FN113]. HR 5040 107th Cong. § 204 (2002).

[FN114]. HR 5040 107th Cong. § 206 (2002).

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[FN115]. HR 5040 107th Cong. § 301 (2002).

[FN116]. Id.

[FN117]. HR 5040 107th Cong. § 401 (2002).

[FN118]. HR 5040 107th Cong. § 601 (2002).

[FN119]. HR 5040 107th Cong. § 602 (2002).

[FN120]. HR 5040 107th Cong. § 606 (2002). An amendment would have been added to the Internal Revenue Code of 1986. The amendment allowed for a tax credit of 60 percent of non-reimbursed mold inspection and remediation expenses paid or incurred by the taxpayer. HR 5040 107th Cong. § 501 (2002). The tax credit is limited to \$50,000 annually.

[FN121]. See Democratic Push for EPA Mold Exposure Rules Draw GOP Fire, Inside EPA Environmental Policy Alert, Vol. XIX, No. 16, Aug. 7, 2002 at 26.

[FN122]. Id. ("One EPA source says issuing a specific threshold for harmful mold exposure would place a blanket over individual differences in exposure and also pull the agency into unwanted legal disputes.").

[FN123]. This provision includes, but is not limited to, schools and multifamily dwellings.

[FN124]. Task Force on Indoor Air Quality, 2001 Md. Laws ch. 591; 5 Res. 77, 204th Leg. The Maryland legislation required that a task force be formed to study and report on indoor air quality. The task force issued the report on July 1, 2002. It includes a discussion of mold. Id.

[FN125]. Id.

[FN126]. H.R. 1253, 112th Gen. Assem., 2d Reg. Sess. (Ind. 2002) (unenacted).

[FN127]. Id.

[FN128]. Id.

[FN129]. Id. A similar bill was proposed in New York. S.896, 2003-2004 Reg. Sess. (N.Y. 2003) (unenacted). The New York proposal focuses on exposure limits and standards for assessment of molds. Id.

[FN130]. An extensive number of articles have addressed environmental auditing and assessment techniques and/or the various issues associated with them. See, e.g., Michael Ray Harris, Promoting Corporate Self-Compliance: An Examination of the Debate Over Legal Protection for Environmental Audits, 23 ECOLOGY L. Q. 713 (1996); Donald A. Carr & William L. Thomas, Devising a Compliance Strategy Under the ISO 14000 International Environmental Management Standards, 15 PACE ENVTL. L. REV. 86-87 (1997); James M. Weaver, et. al., State Environmental Audit Laws Advance Goals of Cleaner Environment, 11 NAT. RESOURCES & ENV'TL. 9 (1997); Dara B. Less, Incentives for Self-Policing: The Need for a Rule, 2 ENVTL. LAW. 773 (1996); David Sorenson, The U.S. Environmental Protection Agency's Recent Environmental Auditing Policy and Potential Conflicts with State-Created Environmental Audit Privilege, 9 TUL. ENVTL. L.J. 505 (1996); Lisa Koven, The Environmental Self-Audit Evidentiary Privilege, 45 UCLA L. REV. 1190 (1998); Miri Berlin, Environmental Auditing: Entering the Eco-Information Highway, 6 N.Y.U. ENV'TL. L.J. 637 (1998); Brooks M. Beard, The New Environmental Federalism: Can The EPA's Voluntary Audit Policy Survive?, 17 VA. ENV'TL. L.J. 27 (1997); David A. Danna, The Perverse Incentive of Environmental Audit Immunity, 81 IOWA L. REV. 976 (1996); Rena I. Steinzor, Reinventing Environmental Regulation: The Dangerous Journey From Command to Self-Control, 22 HARV. ENV'TL. L. REV. 165 (1998); Kirk F. Marty, Moving Beyond the Body Count and Toward Compliance: Legislative Options for Encouraging Environmental Self-Analysis, 20 VT. L. REV. 499-500 (1995); Terrell E. Hunt & Timothy A. Wilkins, Environmental Audits and Enforcement Policy 16 HARV. ENV'TL. L. REV. 365 (1992);

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Timothy T. Jones, Walter G. Wright, Jr. & Mary Ellen Ternes, *Environmental Compliance Audits: The Arkansas Experience*, 21 U. ARK. LITTLE ROCK L. REV. 191 (1999) Stensvaag, *The Fine Print of State Environmental Audit Privileges*, 16 UCLA J. ENV'TL. L. & POL'Y. 69 (1998).

[FN131]. Two authors contrast financial auditing with environmental audits by stating: "In addition, unlike the case of the results of financial audits, even public companies often regard environmental data obtained through an internal audit as non-public information." George Van Cleve & Keith W. Holman, *Promise and Reality in the Enforcement of the Amended Clean Air Act II: Federal Enforceability and Environmental Auditing*, 27 ENVTL. L. REP. 10151, 10158 (1997).

[FN132]. A related risk is that by definition company or facility management are provided knowledge of the existence of violations of federal environmental programs. The federal and some state environmental statutes provide that criminal penalties may be imposed in certain circumstances in the case of knowing violations. See Andrew J. Turner, *Mens Rea in Environmental Crime Prosecutions: Ignorantia Juris and the White Collar Criminal*, 23 COL. J. OF ENV'TL. L. 217 (1998). Once such violations are identified facility management may have been provided "knowledge" of the violations. Consequently, the failure to address such noncompliance risks the imposition of criminal penalties. Company or facility management should therefore be prepared prior to undertaking the audit to remedy any violation that is discovered. One early commentator opined it may be unwise for a company to undertake an environmental audit if it does not intend to act on the results. See Phillip Reed, *Environmental Audits and Confidentiality: Can What you Know Hurt You as Much As What You Don't Know?*, 13 ENVTL. L. REP. 10303 (1983).

[FN133]. See generally, James W. Moorman & Laverne S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How to Do Them and How Not To Do Them*, 26 WAKE FOREST L. REV. 97 (1991).

[FN134]. Arkansas Natl. Bank v. Cleburne Co. Bank, 258 Ark. 329, 331, 525 S.W.2d 82 (1975). The Seventh Circuit Court of Appeals has stated that the privilege can be invoked: (1) Where legal advice of any kind is sought, (2) from a professional legal advisor in his capacity as such, (3) the communications relating to that purpose, (4) made in confidence, (5) by the client, (6) are at his instance permanently protected, (7) from disclosure by himself or the legal advisor, (8) except the protection be waived. United States v. Lawless, 709 F.2d 485, 487 (7th Cir. 1983) (citing 8 JOHN HENRY WIGMORE, EVIDENCE § 2292).

[FN135]. 147 F.R.D. 82 (E.D. Pa. 1992).

[FN136]. In 1989 a federal district court rejected the application of the attorney-client privilege because the company failed to demonstrate that its in-house counsel was acting in a legal capacity. United States v. Chevron, No. CIV-88-6681, 1989 U.S. Dist. LEXIS 12267, at *17 (E.D. Pa. Oct. 16, 1989).

[FN137]. 853 F. Supp. 156 (E.D.N.Y. 1994).

[FN138]. 777 P.2d 686 (Ariz. 1989).

[FN139]. No. CV 91-646-WDK, 1994 WL 212135 at *20 (C.D. Cal. Sept. 16, 1993).

[FN140]. Certain procedures may enhance the possibility of the applicability of the privilege. Two authors suggest the following if an outside environmental consultant is retained to conduct an audit:

The consultant should report directly to counsel for purposes of protecting the information gathered as privileged, and to control the type of record being assembled. All draft and final reports should be submitted to outside counsel for review and distribution. Distribution of such reports should be limited within the company on a need-to-know basis, and confidential materials should be labeled and segregated from nonprivileged materials.

Mary Ellen Kris & Gail L. Vannelli, *Today's Criminal Environmental Enforcement Program: Why You May be Vulnerable and Why You Should Guard Against Prosecution Through an Environmental Audit*, 16 COL. J. OF ENVTL. L. at 248 (1991).

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[FN141]. 157 F.R.D. 522 (N.D. Fla. 1994); See also, CPC Int'l, Inc. v. Hartford Accident & Indem. Co., 620 A.2d 462 (N.J. 1992), which found a privilege. The self-critical analysis privilege is also recognized in a variety of other consulting contexts. See generally, Tharp v. Sivy Steel Corp., 149 F.R.D. 177 (S.D. Iowa 1993); Banks v. Lockheed-Georgia Co., 53 F.R.D. 283 (N.D. Ga. 1971); Bredice v. Doctors Hospital, Inc. 50 F.R.D. 249 (D.D.C. 1970).

[FN142]. See Joiner v. Hercules, Inc., 169 F.R.D. 695, 698-99 (S.D. Ga. 1996).

[FN143]. 132 F.R.D. 8, 9-10 (D. Conn. 1990).

[FN144]. See Carr v. El Dorado Chemical Co., No. 96-1081, 1997 U.S. Dist. LEXIS 5752 (W.D. Ark. April 14, 1997). The court addressed a motion to compel production of an environmental audit. In the opinion the court summarized the restrictions to this privilege as:

(1) [T]he privilege typically extends only to subjective impressions and opinions contained in a written report, not objective facts (citing Webb v. Westinghouse Electric Corp., 81 F.R.D. 431, 434 (E.D. Pa. 1978)).

(2) [T]he privilege makes sense only when the protected information 'must be of a type whose flow would be curtailed if discovery was allowed.' (quoting Dowling v. American Hawaii Cruises, Inc., 971 F.2d 423, 425-26 (9th Cir. 1992)).

(3) [T]he privilege arguably may not apply when the materials are relevant to the investigation of a federal regulatory agency (citing Federal Trade Commission v. TRW, Inc., 620 F.2d 207, 210-11 (D.C. Cir. 1980)).

(4) '[N]o material should be privileged unless it was prepared with the expectation that it would be kept confidential, and has in fact been kept confidential.' (quoting Dowling, 971 F.2d at 426).

[FN145]. See id. at 25.

[FN146]. See id. This decision is one of several discussed in a 1998 United States House of Representatives hearing. See The Federal-State Relationship: A Look Into EPA Regulatory Efforts: Hearing Before the Subcommittee on Oversight and Investigations of the House Committee on Commerce, 105th Cong. 56 (1996).

[FN147]. Parker v. Southern Farm Bureau Ins. Co., 326 Ark. 1073, 935 S.W.2d 556 (1996).

[FN148]. Fed. R. Civ. P. 26(b)(3).

[FN149]. See Diversified Industries, Inc. v. Meredith, 572 F.2d 596, 604 (8th Cir. 1977). In an unrelated context, the EPA itself asserted both the attorney-client and work-product privileges in a successful attempt to prevent disclosure under the federal Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, et seq., of various documents it generated related to four Michigan Superfund sites. See Chemcentral/Grand Rapids Corporation v. United States Environmental Protection Agency, No. 91-C-4380, 1992 WL 281322, at *5 (N.D. Ill. Oct. 6, 1992). The Comprehensive Response Compensation and Liability Act of "Superfund" is found at 42 U.S.C. § 9601 et seq. In Chemcentral the court found that various EPA documents fit within either the attorney-client or work-product privileges and therefore met the deliberative process exemption of the FOIA. This exemption protects communications between the federal agencies and outside consultants or other persons whose opinions or recommendations are part of the agency's own deliberative process. See Dow Jones & Co., Inc. v. Dept. of Justice, 917 F.2d 571, 574-75 (D.C. Cir. 1990). In addressing the work-product privilege the Chemcentral court found that the documents at issue did not simply involve collecting background information regarding the four Michigan Superfund sites. The court also cited the fact that the EPA office labeled the documents "Enforcement Confidential" or "Attorney-client Privileged."

[FN150]. Various versions of such legislation are found in states such as Alaska, Arkansas, Colorado, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Mississippi, Montana, Nevada, New Hampshire, Ohio, Oregon,

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South Carolina, South Dakota, Texas, Utah, Virginia and Wyoming. Douglas P. McLeod & Kirk F. Marty, Can You Afford to Perform an Environmental Audit?, Presentation at the Air and Waste Management Association's 91st Annual Meeting (June 1998).

[FN151]. Ark. Code Ann. § 8-1-303(a) describes the scope of the privilege:

In order to encourage owners and operators of facilities and persons conducting other activities regulated under this chapter, or its federal counterparts or extensions, both to conduct voluntary internal environmental audits of their compliance programs and management systems and to assess and improve compliance with statutory and regulatory requirements, an environmental audit privilege is created to protect the confidentiality of communications relative to voluntary internal environmental audits.

[FN152]. Ark. Code Ann. § 8-1-302(4). The term environmental audit report is broadly defined to include:

1. Field notes, records of observations, finds, opinions, suggestions, conclusions, drafts, memoranda, drawings, photographs, computer-generated or electronically recorded information, maps, charts, graphs, and surveys collected or developed for the primary purpose of preparing an environmental audit;

Ark. Code Ann. § 8-1-302(4)(A). The potentially protected material clearly encompasses a number of documents in addition to the actual audit report itself. It is therefore important for facilities to recognize that in states such as Arkansas information (i.e. sampling data, etc.) or documents (i.e., employee interviews, etc.) are initially generated the required statutory procedures to provide them confidentiality should be followed to ensure protection for these materials. See id.

2. An audit report prepared by the auditor that includes: (a.) the scope of the audit; (b.) the information gained in the audit; (c.) conclusions and recommendations, (d.) exhibits and appendices;

See Ark. Code Ann. § 8-1-302 (4)(B).

3. Memoranda and documents analyzing a portion of or all of the audit report and discussing implementation issues; and

See Ark. Code Ann. § 8-1-302 (4)(C).

4. An implementation plan that addresses correcting past compliance, improving current compliance, and preventing future noncompliance.

See Ark. Code Ann. § 8-1-302 (4)(D).

[FN153]. Ark. Code Ann. § 8-1-304.

[FN154]. See *Carla Liristis, et al. v. American Family Mutual Insurance Company*, 1 CA-CV00-0539, 2002 Ariz. App. LEXIS 203 (June 27, 2002) (dispute as to whether homeowner's insurance policy covered certain damages associated with mold).

[FN155]. Relevant examples are the specialty policies developed to cover various environmental risks. See Ann M. Waeger & Jack Fersko, Current Insurance Products for Insuring Against Environment Risks, *The Practical Real Estate Lawyer* (Sept. 1999).

[FN156]. See *Florida May Be The Next Hotbed for Mold Legislation*, 9 *Industrial Environment*, Vol. 13 (Sept. 2002) (reference to 50 Florida insurance companies asking state insurance regulators to approve mold exclusion endorsements). The Deputy Director of Florida Department of Insurance noted that most Florida insurance policies will cover mold damage only when it is caused by a covered peril such as a hurricane or windstorm. Mr. Roddenberry also noted: "If mold results from sudden, accidental change of water, then its remediation is covered within policy limits", Roddenberry complained. "But if mold develops from construction defects or a homeowners

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negligent maintenance, it's not the insurer's responsibility." Id.

[FN157]. Even if coverage is provided, the absence of standards or exposure limits complicates the scope of the remedial obligation. See *Trader surpa* note 39 at 13 ("Cleanup of typical pollution losses is subject to specific standards. Given the lack of cleanup standards for CPL, policies need to be amended to provide coverage for remedial and cleanup costs that are not subject to specific standards.").

[FN158]. For example, see *Insurance Company of North America v. Snyder Moving and Storage, Inc. of Phoenix*, 2000 U.S. App. LEXIS 25173 (Dec. 6, 2002) (reference to Comprehensive Transportation and Storage Liability Policy which covers post-flood rust, mold and mildew under certain circumstances).

[FN159]. These questions are not limited to mold. The insurance coverage applicable to various other indoor air pollutants have been addressed by the courts. See Thomas K. Bick & Lisa G. Youngblood, *The Pollution Exclusions Saga Continues: Does it Apply to Indoor Releases?*, 5 S.C. ENV'TL. L.J. 119 (Spring 1997).

[FN160]. In pollution exclusions, the end of the clause often contains language providing that the exclusion does not apply to discharges of pollutants if it was "sudden or accidental." See *Harkins supra* note 22 at 1120. Courts often interpret these words also to mean "unexpected and unintended", thus not precluding coverage for the insured. Id.

[FN161]. *Liristis v. American Family Mutual Ins. Co.*, 2002 Ariz. App. LEXIS 203, No. 1 CA-CV 00-0539 (June 27, 2002). The covered peril was the fire for which a claim was originally filed.

[FN162]. Id. at *3.

[FN163]. Id. at *4.

[FN164]. Id. at *4.

[FN165]. Id. at *5.

[FN166]. Id. at *6.

[FN167]. Id. at *9.

[FN168]. *Liristis*, 2002 Ariz. App. LEXIS 203, at *10, No. 1 CA-CV 00-0539 (June 27, 2002).

[FN169]. Id.

[FN170]. No. CIV.A.00-1209-T4, 2002 U.S. Dist. LEXIS 5167 (E.D. La. March 15, 2002).

[FN171]. Id. at *5.

[FN172]. Id. at *4.

[FN173]. Id. at *11.

[FN174]. Id. at *8-9.

[FN175]. Id. at *9.

[FN176]. *Liberty Mutual Fire Ins. Co. v. Ravannack*, No. CIV.A.00-1209-T4, 2002 U.S. Dist. LEXIS 5167, at *9 (E.D. La. March 15, 2002).

[FN177]. Id.

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[FN178]. Id. at 10-11.

[FN179]. Id. at 11.

[FN180]. Id. at 14.

[FN181]. No. 07-02-0399-CV, 2003 Tex. App. LEXIS 7915.

[FN182]. Id. at *3.

[FN183]. Id. at *4.

[FN184]. Id.

[FN185]. Id. at *10.

[FN186]. Id.

[FN187]. Id. at *7.

[FN188]. Id. at *14.

[FN189]. Id. at *16.

[FN190]. Id.

[FN191]. Id. at *23

[FN192]. See Generally; Flores, 2003 U.S. Dist. LEXIS 13403.

[FN193]. Flores, 2003 U.S. Dist. LEXIS 13403 at *11,

[FN194]. See, e.g., Highlands Ins. Co. v. Employers' Surplus Lines Ins. Co., 491 F.Supp. 169, 171 n.1 (E.D. La. 1980).

[FN195]. Id. at *12. See also; American Home Assurance Co. v. Unitramp, Ltd., 146 F.3d 311, 313 (5th Cir. 1998).

[FN196]. Id.

[FN197]. Id. at *13.

[FN198]. Id.

[FN199]. Walter J. Andrews, Lon A. Beck & William A. Schreiner, Jr., Missouri Federal Court: Manifestation Trigger, Late Notice Bar Coverage For Water Intrusion Damage, (Shaw Pittman, L.L.P. Washington, D.C.), September 2003, Number 35.

[FN200]. Id. (Although Hammons denied knowing of the manifested damages, the court found that there was substantial evidence to the contrary, and held that the claimed losses were actually losses-in-progress at the time the insurance contracts incepted).

[FN201]. 158 Wis.2d 64, 462 N.W.2d 218 (Wisc. App. 1990).

[FN202]. Id. at 72, 462 N.W.2d at 222.

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[FN203]. Id., 462 N.W.2d at 222.

[FN204]. Id. at 74, 462 N.W.2d at 223.

[FN205]. Id. at 75, 462 N.W.2d at 223.

[FN206]. Id. at 77, 462 N.W.2d at 224.

[FN207]. Leverence, 158 Wis.2d at 77-78, 462 N.W.2d at 224.

[FN208]. Id. at 80-82, 96-97, 462 N.W.2d at 225-26.

[FN209]. Id. at 97, 462 N.W.2d at 232.

[FN210]. Id.

[FN211]. Blaine Construction Corp. v. Ins. Co. of N. America, 171 F.3d 343, 345 (1999).

[FN212]. Id. at 346.

[FN213]. Id.

[FN214]. Id.

[FN215]. Id.

[FN216]. Id. at 347.

[FN217]. Id.

[FN218]. Id.

[FN219]. Id. at 345.

[FN220]. Id. at 353.

[FN221]. 309 F.3d 1068 (8th Cir. 2002).

[FN222]. Id. at 1071.

[FN223]. Id. at 1070.

[FN224]. Id.

[FN225]. Id.

[FN226]. Id.

[FN227]. Maples, 309 F.3d at 1071.

[FN228]. Cooper v. American Family Mut. Ins. Co., 184 F. Supp. 2d 960 (D. Ariz. 2002).

[FN229]. Id. at 963.

[FN230]. Id. at 962.

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[FN231]. *Id.* at 963.

[FN232]. *Estate of James Campbell v. Factory Mut. Ins. Co.*, 234 F. Supp. 2d 1182, 1187 (W.D. Wash 2002).

[FN233]. *Id.*

[FN234]. *Id.* at 1186.

[FN235]. *Fiess v. State Farm Lloyds*, No. H-02-1912, 2003 U.S. Dist. LEXIS 10962, *31 (S.D. Tex. June 3, 2003).

[FN236]. *Id.*

[FN237]. *Id.* at *32.

[FN238]. No. H-02-1912, 2003 U.S. Dist. LEXIS 10962 (S.D. Tex. June 3, 2003).

[FN239]. *Id.* at *34.

[FN240]. *Id.* at *23.

[FN241]. *Id.* at *18.

[FN242]. *Id.* at *19.

[FN243]. *Id.* at *23.

[FN244]. *Fiess*, 2003 U.S. Dist. LEXIS at *26.

[FN245]. *Id.* at *24.

[FN246]. *Id.* at *24-25.

[FN247]. *Id.* at *30.

[FN248]. *Home Ins. Co. v. McClain*, No. 05-97-01479-CV, 2000 Tex. App. LEXIS 969 (Tex. App. February 10, 2000) (unpublished).

[FN249]. *Id.* at *8. The policy exclusions stated that Home Insurance would not cover losses caused by: "wear and tear, deterioration or any quality in property that causes it to damage or destroy itself," and "rust, rot, mold or other fungi." *Id.* The ensuing loss clause provided that "we do cover ensuing loss caused by . . . water damage . . . if the loss would otherwise be covered under this policy." *Id.*

[FN250]. *Id.* at *8.

[FN251]. *Id.* at *11.

[FN252]. *Flores v. Allstate Tex. Lloyd's Co.*, 2003 U.S. Dist. LEXIS 13403 (S.D. Tex. July 16, 2003).

[FN253]. *Id.* at *3 (footnote 3).

[FN254]. *Id.*

[FN255]. *Id.* at *2.

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[FN256]. See COUCH ON INSURANCE 3d at § 127.14: Stempel, LAW OF INSURANCE CONTRACT DISPUTES (2d ed.) § 14.11(a).

[FN257]. See, e.g., Deni Assocs. of Florida, Inc. v. State Farm Fire & Cas. Co., 711 So.2d 1135 (Fla. 1998) (holding that an ammonia spill in insured's office building is covered by exclusion); Assicurazioni Generali SPA v. Neil, 160 F.3d 997 (4th Cir. 1998) (holding that carbon monoxide leak in insured's hotel is covered by exclusion).

[FN258]. See, e.g., Nautilus Ins. Co. v. Jaber, 188 F.3d 27 (1st Cir. 1999) (holding that hazardous fumes from a roofing chemical are not pollutants within the exclusion); American States Ins. Co. v. Koloms, 687 N.E.2d 72 (1997) (holding that carbon monoxide from a leaking furnace is not a pollutant with the exclusion).

[FN259]. See Nautilus Ins. Co., 188 F.3d at 30; Continental Cas. Co. v. Rapid-American Corp., 80 N.Y.2d 640, 653-654 (1993).

[FN260]. See West Am. Ins. Co. v. Tufco Flooring, 104 N.C. App. 312, 323 (1991) overruled on other grounds by Gaston City Dyeing Machine Co. v. Northfield Ins. Co., 351 N.C. 293 (2000); Continental Cas. Co., 80 N.Y.2d at 654.

[FN261]. See Pipefitters Welfare Educ. v. Westchester Fire Inc. Co., 976 F.2d 1037, 1043 (7th Cir. 1992).

[FN262]. See Oates v. State of New York, 157 Misc. 2d 618 (Ct. Cl. 1993); Reliance Ins. Co. v. Moessner, 121 F.3d 895 (3d Cir. 1997).

[FN263]. Meridian Mut. Ins. Co. v. Kellman, 197 F.3d 1178 (6th Cir. 1999); Center For Creative Studies v. Aetna Life and Cas. Co., 871 F. Supp. 941 (E.D. Mich. 1994).

[FN264]. 2002 U.S. Dist. LEXIS 3594, No. 3:99-CV-1623-D (N.D. Texas-Dallas, March 5, 2002).

[FN265]. Id. at *3-4.

[FN266]. Id. at *4.

[FN267]. Id. at *4-5.

[FN268]. Id. at *10.

[FN269]. Id. at *10-11. The court also considered an exclusion based on maintenance of the roof, which was required in the policy. Id. at *17-18. The court precluded recovery on this basis as well because it found the roof was not properly cared for. Id. at *18.

[FN270]. No. 2002-CA-1811, 2003 La. App. LEXIS 1769 (La. Ct. App. June 4, 2003).

[FN271]. Id. at *2.

[FN272]. Id.

[FN273]. Id. at *3-*5.

[FN274]. Id. at *18.

[FN275]. Id. at *6.

[FN276]. M.L.T., 2003 La. App. LEXIS at *7.

[FN277]. Id. at *15.

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[FN278]. Id. at 15.

[FN279]. Id.

[FN280]. Id. at 20.

[FN281]. Id. at 18.

[FN282]. M.L.T., 2003 La. App. LEXIS at *20.

[FN283]. 462 N.W.2d 218 (Wis. 1990).

[FN284]. Id. at 232.

[FN285]. Id.

[FN286]. Id.

[FN287]. Id.

[FN288]. Id.

[FN289]. 39 P.3d 903 (Or. 2002).

[FN290]. Id. at 905.

[FN291]. Id. The insured's doctor recommended that the insured limit exposure to her own home. Id.

[FN292]. Id. at 906.

[FN293]. Id. at 907.

[FN294]. 45 Fed. Appx. 754, 2002 U.S. App. LEXIS 18379 (9th Cir.).

[FN295]. Id. at **2.

[FN296]. Id.

[FN297]. Id. at **4.

[FN298]. Id. at **5.

[FN299]. Id.

[FN300]. Id.

[FN301]. Id.

[FN302]. Id. at **6.

[FN303]. Id. at **7.

[FN304]. Id. at **15.

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[FN305]. *Id.*

[FN306]. 312 Ark. 128, 851 S.W.2d 403 (1993).

[FN307]. *Id.* at 129, 851 S.W.2d at 403.

[FN308]. *Id.*, 851 S.W.2d at 403.

[FN309]. *Id.*, 851 S.W.2d at 403.

[FN310]. *Id.*, 851 S.W.2d at 404.

[FN311]. *Id.* at 130, 851 S.W.2d at 404.

[FN312]. *Minerva Enters., Inc. v. Bituminous Cas. Corp.*, 312 Ark. 128, 134, 851 S.W.2d 403, 406 (1993).

[FN313]. Mike Bischoff, Comment, *Theories of Toxic Mold Liability Facing Arizona Homebuilders*, 34 ARIZ. ST. L.J. 681, 684 (2002).

[FN314]. *Id.* Schools have been a prime target for toxic mold litigation because of the increasing use of modular buildings which contain materials mold feed on. *Id.*

[FN315]. Stephen J. Henning & Daniel A. Berman, *Mold Contamination: Liability and Coverage Issues: Essential Information You Need to Know for Successfully Handling and Resolving Any Claim Involving Toxic Mold*, 8 HASTINGS W.-N.W. J. ENV'TL. L. & POL'Y. 73, 75 (2001).

[FN316]. 50 Ark. App. 1, 899 S.W.2d 482 (1995).

[FN317]. *Id.* at 1-2, 899 S.W.2d at 483.

[FN318]. *Id.* at 1, 899 S.W.2d at 483.

[FN319]. *Id.* at 1-2, 899 S.W.2d at 483. The parties stipulated that the presence of this mold in the appellee's classroom caused her sinus difficulties which required several surgeries. *Id.* at 2, 899 S.W.2d at 483.

[FN320]. *Id.* at 1, 899 S.W.2d at 483. Ark. Code Ann. § 11-9-601(e)(1) defines an "occupational disease" as a disease that results in disability or death and arises out of or in the course of the employment or occupation. *Id.*, 899 S.W.2d at 483.

[FN321]. *Id.* at 2, 899 S.W.2d at 483.

[FN322]. *Id.* at 3-4, 899 S.W.2d at 484.

[FN323]. For example, one author notes Farmers Insurance Company's mold related claims jumped from 150 in 1999 to 12,000 in 2001. Trader *supra* note 39 at 12.

[FN324]. Homeowner policies have a particular focus. Texas homeowners have had greater difficulty obtain such insurance since State Farm, Progressive, Farmers and Allstate have stopped issuing new homeowners' policies in the state. *Id.*

[FN325]. See Andrew Wood, *Insurance: Chemical Firms Tough It Out In A Hard Market*, October 2, 2002 at 19 (reference to recent exclusion of risks such as mold from traditional liability policies); Moerdler *supra* note 11 (referencing insertion of mold exclusions into insurance policies); Julavits *supra* note 15 at 1 (referencing several insurance companies' decisions to temporarily cease issuing homeowner policies in Texas because of a large number of claims involving mold); Pena-Alfaro *supra* note 6 at 548 (referencing Texas Insurance Commissioner's

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contemplation in 2001 of reducing mold claims by altering policy coverage); Trader *supra* note 39 at 13 (noting rapidly growing number of mold exclusions in commercial general liability policies).

[FN326]. Some homeowner insurance policies now include language stating coverage is not provided for "continuous or repeated seepage or leakage of water that occurs over a period of 14 days or more." W. Edward Carlton, *Mold Litigation Continues to Grow*, FOR THE DEFENSE, Aug., 2002, at 28. A commercial policy exclusion might bar reimbursement for "loss or damage caused by or resulting from...rust, corrosion fungus, decay, detrimental, hidden or latent defect, or any quality in property that causes it to damage or destroy itself." *Id.*

[FN327]. *Id.* (discussion of efforts in Texas to ensure homeowners continued access to policies for their homes).

[FN328]. For example see Memorandum from Arkansas Insurance Department to All Licensed Property and/or Casualty Insurers, Trade Associations, National Association of Insurance Commissioners, and other Interested Parties, Conditions for Obtaining Approval of Mold Exclusions - Bulletin No. 10-2002 (April 22, 2002). The Arkansas Insurance Department ("Department") stated that Arkansas homeowner insurance policies provide coverage for mold if it is a direct result of a covered loss. *Id.* The Department noted its intention to keep this type of coverage in place. *Id.* Other states have allowed property and casualty insurers to limit coverage for liability stemming from mold. For example, New Jersey requires Insurance Service Organization member insurers to provide minimum aggregate coverages and optional increased limits for all property and liability coverages except for losses caused by fire or lightning. See N.J. Ins. Dept. Bulletin No. 01-14. Specifically New Jersey requires Insurance Service Organization member insurers to provide property coverage of \$10,000, on an aggregate basis, with optional increased limits of \$25,000 and \$50,000. See *id.* Those members are also required to provide liability coverage in the amount \$50,000, on an aggregate basis, with an optional increased limit of \$100,000. See *id.* Insurers who are not ISO members may request both to provide options to purchase higher liability options and to provide stricter exclusions. Maryland requires a minimum aggregate property coverage for mold and remediation of \$15,000 and does not allow insurers to charge an additional deductible for mold loss. See Maryland Insurance Administration Findings and Decision Relating to Mold Limitations for Property and Casualty Insurance. With regard to liability coverage, Maryland prohibits insurers from excluding coverage for mold but allows insurers to limit coverage to an aggregate of \$50,000. See *id.*

[FN329]. Adverse market conditions have caused liability coverage to become more expensive.

[FN330]. For example, California experienced a 25% increase in premiums.

[FN331]. Some contractor insurance carriers may place exclusions on buildings with stucco finishes because of alleged moisture issues.

[FN332]. The addition of mold to existing pollution risks may motivate more contractors to obtain the necessary policies to cover their liabilities.

[FN333]. See generally Jack Fersko & Ann M. Waeger, Using Environmental Insurance in Commercial Real Estate Transactions, 17 PROBATE & PROPERTY 30, 31 (Jan/Feb 2003).

[FN334]. See Environmental Insurance and Public Sector Brownfields Programs: Factors Affecting Pursuit of Insurance as a Redevelopment Tool, Northern Kentucky University/University of Louisville 8-9 (Nov. 1999) (overview of three policies).

[FN335]. See News Briefs, National Real Estate Investor (July 2000) (stating four Wall Street agencies now approve the use of environmental insurance to underwrite commercial mortgage-backed securities transactions in lieu of a Phase I environmental assessment).

[FN336]. Insurance may enable the purchaser to obtain financing without necessarily having to provide lender with environmental indemnity from a credit-worthy entity.

[FN337]. The possibility these policies might enhance the valuation of commercial mortgage-backed securities in

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the pool process is discussed in Joseph Boren, *Filling the Gap: Environmental Protection for Lenders*, 12 Risk & Insurance, Sept. 16, 2001 at 35. See also Lynn Goch, *Sealing the Deal*, 100 Best's Review, March 1, 2000 at 77 ("Several creditor environmental policies are becoming a more common method of protecting investors in securities that are backed by pools of commercial mortgages."). However, see Brick *supra* note 368 ("Debt rating agencies have put up significant resistance to the use of these insurance policies, and banks have been forced to listen because their loans usually become profitable only if they can be resold to investors as packages of commercial mortgage-backed securities.").

[FN338]. Trader *supra* note 39 at 13 (noting insurance companies providing pollution liability coverage use their own forms).

[FN339]. The application process for such policies places a particular emphasis on the disclosure of known pre-existing conditions. For example, in *Goldenberg Development Corporation, et al. v. Reliance Insurance Company of Illinois*, No. 00-CV-3055, 2001 U.S. Dist. LEXIS 12870 (May 15, 2001) a developer purchased a policy intended to cover the cost of unforeseen remediation that might be required at a development site. *Id.* at *1. The developer subsequently discovered various buried materials it characterized as solid waste. *Id.* at *2. The insurance company denied the claims on the basis that the "known conditions" exclusion in the policy applied. *Id.* This exclusion barred coverage for pollution conditions existing at the inception of the policy which were reported to developer with responsibility for environmental affairs, unless all material facts relating to the pollution conditions were disclosed to the insurance company prior to the inception of the policy. *Id.* The dispute centered on certain developer reports referencing the conditions that were not provided to the insurance company. *Id.* The developer argued that the information in such reports were referenced in other reports that had been provided to the insurance company. *Id.* at *3 - *4. See also Goch *supra* note 605 (noting that environmental insurance policies can be tailored to fit a specific transaction).

[FN340]. See *Environmental Insurance and Public Section Brownfields Programs: Factors Affecting Pursuit of Insurance as a Redevelopment Tool*, Northern Kentucky University/University of Louisville 25 (Nov. 1999) (These products can be relatively complicated. The Northern Kentucky report notes: "While they are thus useful now, they are also quite complex. Although there are standard, 'off-the-shelf' policies available, many policies are heavily 'manuscripted' or tailored. This means that expertise is required to select the coverage that will protect against the risks attendant on particular projects.") *Id.*

[FN341]. The policies may also exclude lead-based paint, asbestos in addition to mold. Michael Brick *Commercial Real Estate: No Environmental Study, But the Loan Still Clears*, *The New York Times*, Nov. 13, 2002 at 10C.

[FN342]. Two commentators noted: "Claims against general liability and first-party property damage policies are on such a rise and have resulted in staggering verdicts in favor of insureds, certain insurers issuing environmental insurance policies have begun automatically including exclusions for mold in their premium indication for each new policy." See also Carlton *supra* note 591 at 29 (noting some insurers have introduced clearer and more absolute exclusionary language in their policies). Some EIL insurance carriers may offer a mold "buyback". Jakubovitz *supra* note 611 at 11. The buyback may have limits. One author scenario in the construction contract stating: "For example, one of the microbial matter coverage endorsements which provides mold coverage with a sublimit, also adds an additional exclusion to the policy for 'Failure to Maintain and Construction Defects.' For an insured in the construction business, a large portion of the mold cases stem from construction defect claims. The primary reason a builder, contractor, or any trade in the business purchases this mold coverage is for protection from these risks. This additional language, in effect, negates the additional protection the policyholder requires." *Id.*

[FN343]. Rachel Jakubovitz, *Mold: What About Environmental Impairment Liability (EIL) Coverage?*, 4 Toxic Torts and Env'tl. Litigation Committee Newsletter, July 2002 at 11.

[FN344]. Contractors may be able to add mold coverage to its standard policy at an additional cost.

[FN345]. An author notes the underwriting may include type of property, type of past and present operations, maintenance and repair review, and needed coverage.

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[FN346]. One commentator notes: "In contrast, insurance companies providing pollution liability coverage use their own terms and as a result, discussion of that coverage must be generalized."

[FN347]. For example, see *Christine Pick v. Pacific Heights Townhouses, et al.*, 2002 Cal. App. Unpub. LEXIS 8957 (2002) (plaintiff lessee sued lessor alleging mold in leased apartment caused certain illnesses).

[FN348]. *Louise Terry, et al. v. Ottawa County Board of MRDD, et al.*, 2002 Ohio 7299; 2002 Ohio App. LEXIS 7150 (2002) (employees of state agency allege their office environment has been adversely affected by mold); *Miriam K. Blun, et al. v. Council Rock School District*, No. 02-CV-769, 2003 U.S. Dist. LEXIS 3022 (Feb. 19, 2003) (reference to Equal Employment Opportunity Commission determination that school district violated Americans with Disabilities Act ("ADA") by failure to provide teacher reasonable accommodation for disability by forcing her to work in environment exposed to mold which aggravated her respiratory condition).

[FN349]. *Susan G. Martin v. Fulton City School Board*, 2002 N.Y.App. Div. LEXIS 12425 (Dec. 19, 2002) (teacher alleges indoor air quality caused her health problems).

[FN350]. *Benjamin Diletto et al. v. Katnik Corporation*, 2002 Cal. App. Unpub. LEXIS 11814 (2002) (reference to imposition of liability on contractor and architect for mold growth in structure).

[FN351]. Nakano *supra* note 8.

[FN352]. See generally Thomas Jackson, PhD, MAI & Randall Bell, MAI, *The Analysis of Environmental Case Studies*, *The Appraisal Journal* 86 (Jan. 2002).

[FN353]. "As the market becomes more sensitive to environmental risks, the presence of lead-based paint hazards will negatively affect the appraisal value of the property."

[FN354]. Mold may have a chilling effect on real estate transactions similar to that associated with the presence of asbestos.

[FN355]. One commentator notes: "Concerns about potential adverse health effects from exposure to toxic mold and the effect of those concerns on property and rental values have been growing almost as fast as the menacing fungus has begun eating its way through the walls of thousands of residences, office buildings, hotels and other properties in the United States."

[FN356]. See Jeffrey D. Fisher, et al., *Effects of Asbestos on Commercial Real Estate: A Survey of MAI Appraisers*, *The Appraisal Journal* 587 (Oct. 1991) (lack of consensus as to how asbestos affects the market value of commercial property).

[FN357]. These costs would include the actions necessary to prevent its occurrence. They could range from plugging a hole to stopping a drip to major structural modifications to prevent water intrusion. Of course, the material diminishment of value will depend upon the extent of the affected area and projected costs to prevent a reoccurrence of the conditions that facilitated such growth. The quantification of certain potential assessment/remediation costs is presumably a somewhat straightforward calculation.

[FN358]. The potential impact would presumably include difficulty in leasing the structure or tenant demand for rent reduction. See Gary S. Smolker, *The Right to Know*, 72 *Heating, Piping, Air Conditioning*, No. 3, at 94 (March 1, 2000) (asking whether a commercial building will be more difficult to lease after an indoor air pollution problem occurs). A potential tenant may require concessions prior to agreeing to move into a structure.

[FN359]. See Brennan & Turner *supra* note 75 (noting that in elastic rental markets, tenants unhappy with air quality in their leasehold may not renew their lease). The perceived presence of indoor air problems can generate significant concern among structure occupants and/or lessees. See generally J. David Ojor, III & Christine R. Barr, *Emotions In The Air: When Building Syndrome Strikes*, 43 *Risk Management*, Nov. 1996 at 37.

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[FN360]. A lessee/employer will be concerned about employee absenteeism and/or productivity in the event there is a significant indoor air pollution problem. Employers are faced with increased operation costs in the form of sick leave pay and worker compensation costs. The alleged exposure to mold has triggered an ADA claim by an employee arguing that a reasonable accommodation should have been provided by moving her away from a workplace allegedly harboring mold and triggering respiratory problems. *Miriam K. Blun, et al. v. Council Rock School District*, No. 02-CV-769, 2003, U.S. Dist. LEXIS 3622 (Feb. 19, 2003).

[FN361]. Jackson *supra* note 317 at 94 (Jan. 2002) (stating that third party common law claims for personal injuries must be considered in a case study valuation analysis).

[FN362]. The appraiser may recognize the need to ensure that the scope of his or her services is clearly understood. Otherwise, a party relying on the appraisal may argue that it should have identified and/or quantified the indoor air pollutants or other environmental issues. See Guidry *supra* note 81 at 30 ("If the building is judged to have SBS, plaintiff may claim that the appraiser was negligent and should have discovered the problem during the valuation process.").

[FN363]. A discussion of the factors and elements considered in determining the impacts of environmental contamination on property value is found in Jackson *supra* note 317.

[FN364]. This is a reference to "sick building syndrome."

[FN365]. "There are many different costs associated with sick buildings. The most obvious is the cost associated with curing an indoor air quality problem."

[FN366]. For example, see *Bernard Levy, et al. v. M. Ali Tirgan*, No. 76378, 1999 Ohio App. LEXIS 5085 (Oct. 28, 1999) (reference to contract for sale of commercial real estate containing environmental contingency clause); *U.S. Steel Supply, Inc. v. ALCO Standard Corporation*, No. 89 - 20241, 1992 U.S. Dist. LEXIS 13722 *5 -*6 (Sept. 9, 1992) (reference to environmental due diligence period included in asset purchase agreement).

[FN367]. Similar conditional provisions will be found in leasing and lending documents.

[FN368]. The purchasers' failure to definitively include mold as part of the contingency can result in a dispute over whether it is incorporated by the due diligence provisions of the agreement.

[FN369]. Reaching an agreement on the line of demarcation between acceptable and unacceptable conditions may be difficult.

[FN370]. The doctrine of caveat emptor may be an issue when mold is discovered in structures that have been acquired. This is particularly likely when the structure involved is residential in character. In *Bryant v. Bulach*, 2003 Ohio 1609, 2003 Ohio App. LEXIS 1533 (March 31, 2003) the plaintiff acquired a residential structure. She subsequently discovered water leaks and mold growth in the basement. *Id.* Her complaint alleged the seller had an obligation to disclose these problems. *Id.* The court held that the doctrine of caveat emptor precluded recovery by the purchaser for structural defects in real estate. *Id.* at *2. The basis for this conclusion was that reasonable inspection would have discovered the problem, the opportunity to inspect was available and there was no evidence of fraud. *Id.* See also *Riley v. Hosington*, S. Ark. App. 346, 96 S.W.3d 743 (2003) (purchaser of residential structure established fraudulent misrepresentation because of false statements in disclosure statement regarding prior flooding). This association of mold with structural flooding and related defects will presumably heighten the interest in identification and disclosure of such issues.

[FN371]. See *Weinreb v. Hunter, Inc.*, 1997 Mass. Super. LEXIS 429, 10 (Mass. Super. 1997) (holding that the statute begins to run when the person in possession knew or should have known of the presence of indoor contaminants, in this case, asbestos); *contra State Farm Mut. Auto. Ins. Co. v. W.R. Grace & Co.*, 834 F.Supp. 1046, 1050-1051, 1992 U.S. Dist. LEXIS 22074, 11 (U.S. Dist. Ill. 1993) (holding that statute begins to run at the time of possession, regardless of knowledge, even though faulty construction created latent leakage, mold and mildew on the home's floors).

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[FN372]. Alan O. Aas v. Super. Court of San Diego County, 24 Cal. 4th 627, 636, 12 P.3d 1125, 1130, (Cal. 2000).

[FN373]. Washington Courte Condo. Assoc. v. Washington Golf Corp., 150 Ill. App. 3d 681, 685-687, 501 N.E.2d 1290, 1292-1294 (Ill. App. Ct. 1986).

[FN374]. Wawak v. Steward, 247 Ark. 1093, 449 S.W.2d 922, 929 (1970).

[FN375]. Dick v. Pacific Heights Townhouses, 2002 Cal. App. Unpubl. LEXIS 8957 (unpublished opinion). The court found that mere presence of mold, without evidence of toxicity, was insufficient to establish uninhabitability.

[FN376]. See Bullington v. Palangio, 345 Ark. 320, 327, 45 S.W.3d 834, (2001).

[FN377]. Id. at 328, 45 S.W.3d at 839.

[FN378]. Id. at 329, 45 S.W.3d at 840.

[FN379]. Morris v. Ruse, 77 Ark. App. 11, 13, 69 S.W.3d 876, 881 (2002). See also O'Mara v. Dykema, 328 Ark. 310, 319, 942 S.W.2d 854, 859 (1997) (holding that buyers' drafting of the contract provided them notice they were buying "as is", and they were therefore not entitled to any implied warranties).

[FN380]. Carter v. Quick, 263 Ark. 202, 209, 563 S.W.2d 461, 465 (1978).

[FN381]. This section does not address in any detail the role of the building or property manager in operating the commercial leasehold. Building owners often use managers to operate and/or lease their structures. Maryland Report supra note 48 at 14. Their responsibility for addressing indoor air quality issues will vary depending on the extent and nature of their responsibilities. Id.

[FN382]. See U.S. Steel Supply, Inc. v. ALCO Standard Corporation, No. 89 20241, 1992 U.S. Dist. LEXIS 13722 *8 (Sept. 9, 1992) (reference to need for purchaser of facility to undertake additional sampling activities to define baseline environmental conditions).

[FN383]. A similar determination might also be undertaken at the conclusion of the lease term.

[FN384]. The ability to obtain the necessary provisions in the lease is, of course, dependent upon the lessee having sufficient leverage.

[FN385]. Id. The implied warranty of habitability has been an issue in actions involving other indoor pollutants. Plaintiffs have successfully argued that such indoor contaminants have been deemed a potential threat to the health of the structure's occupants. A number of actions have involved the presence of lead-based paint in a structure. Schukoske supra note 25 at 530-534. See also Chase v. Pistolese, 190 Misc. 2d 477, 480, 739 N.Y.S.2d 250, 253 (City Ct. N.Y. 2002) (holding that the lessor's knowledge that lead-based paint in the apartment would be discovered when the space was repainted breached the implied warranty of habitability).

[FN386]. Lazell v. Stone, 2003 Tex. App. LEXIS 2256, 10-11 (Tex. App. 2003) (holding that the presence of asbestos entitled the tenant to withhold rent and amounted to constructive eviction). The doctrine of constructive eviction is addressed in the radon context in Prussman supra note 172.

[FN387]. Ogust v. 451 Broome St. Corp., 285 A.D.2d 412, 413, 727 N.Y.S.2d 877, 877-878 (N.Y. App. Div. 2001) (holding a landlord was enjoined from collecting rent until water conditions which led to mold were corrected).

[FN388]. The absence of governmental standards could make the determination of whether mold growth constitutes a breach of the lease a subjective determination.

[FN389]. Whether the lessor or lessee is responsible for addressing an indoor contaminant and/or the adequacy of

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such efforts has been a source of litigation. A common example has been asbestos. See *American Multi-Cinema, Inc. v. Posel Enterprises*, No. 91-3783, 1992 U.S. Dist. LEXIS 17440 (Oct. 27, 1992) (dispute as to adequacy of lessor's efforts to address asbestos in the leasehold).

[FN390]. These will include HVAC and related equipment. The associated service contracts may be especially important.

[FN391]. See *Ganheart v. Executive House Apartments*, 671 So.2d 525 (La. App. Ct. 1996). The lessee may be entitled to non-pecuniary damages for the failure to repair, including mental anguish, anxiety, and worry. *Id.* The *Ganheart* court noted that a residential lease includes, in addition to the enjoyment of habitable living quarters, the enjoyment of entertaining guests - also a non-pecuniary interest.

[FN392]. *New Haverford Partnership v. Stroot*, 772 A.2d 792, (Del. 2001). The failure must be a proximate cause of the unsanitary or unhealthy conditions of the leased premises, resulting in personal injury to the tenant. *Id.*

[FN393]. The list of reportable events could presumably include such mundane events as broken windows or abnormal moisture accumulation.

[FN394]. Prior to making the requested loan the financing of the acquisition of most commercial and industrial properties is still generally contingent upon a satisfactory environmental audit or assessment. For example, see *Bernard Levy v. M. Ali Tirgan*, No. 76378, 1999 Ohio App. LEXIS 5085 (Ohio Ct. App. Oct. 28, 1999) (bank declined to finance acquisition of property because it was not satisfied with results of the environmental audit). Even if an initial assessment of the proposed collateral is unsatisfactory, further efforts to delineate the conditions at the site (often known as a "phase 2") may address the lender's concerns. See *Brewer v. Better Bus. Brokers & Consultants, Inc.*, 727 So. 2d 1081 (Fla. App. 1999). However, over the past few years some lenders have increasingly used certain insurance policies in lieu of or as a supplement to the initial assessment. Michael Brick, *Commercial Real Estate; No Environmental Study, But the Loan Still Clears*, *The New York Times*, Nov. 13, 2002, at 10C. Some policies will reimburse the lender for the balance of the loan if the borrower is in default and contamination is found that is non-compliant with governmental standards. Many policies exclude coverage for indoor contaminants such as asbestos, lead-based paint and mold. *Id.*

[FN395]. Should a mortgage holder routinely include indoor air quality in the assessment of the mortgaged property).

[FN396]. Sweeney *supra* note 5 at 76 (noting possible lenders' concerns about imposing an additional due diligence cost on borrowers). The question in some instances will be whether indoor air quality issues need to be addressed to satisfy a rating agency evaluating a pool of mortgages that are part of a securitization. Logsdon *supra* note 208. See also *Riskier Mortgages are Being Pooled for Securitization*, 46 *Real Estate Weekly*, Feb. 16, 2002 at 25 (noting lenders are eager to find any solution to environmental issues that is acceptable to rating agencies).

[FN397]. In other words, is the real property collateral a commercial facility, residence (multifamily or single family), industrial operation, etc.?

[FN398]. If standards or exposure limits are eventually issued, they might be referenced.

[FN399]. See also *Benjamin Dillelo et al. v. Katnick Corporation*, 2002 Cal. App. Unpub. LEXIS (2002) (architect apportioned 10% of fault for damages associated with presence of mold in recently constructed house).

[FN400]. In older buildings - which are defined as those built more than ten years ago - the building owner is usually the entity to which blame is assigned unless there have been recent renovations or other work.

[FN401]. The term contractor is intended to include subcontractors and homebuilders for purposes of this discussion. For example see *Booker v. Real Homes, Inc. et al.*, No 04-02-00122-CV, 2003 Tex. App. LEXIS 254 (Jan. 15, 2003) (homebuilder sued for alleged construction defects in new home causing mold growth); *Tunica-Biloxi Indians of LA, et al. v. Pecut*, No. 02-1512 (Jan 30, 2003) (subcontractors among parties sued for mold

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contamination in newly constructed hotel). However, the work and/or services provided by some building materials suppliers may also be scrutinized at a particular construction project. Other relevant project parties might include engineers, construction managers and trades such as carpenters, drywallers, and plumbers. See Latest Developments in Mold Exposure Litigation, 17 Natural Resources & Env'tl. 132, 133 (2002); New Orleans Assets, L.L.C., John Payne et al. v. Carl F. Woodward, et al., No. 01-2171, 2003 U.S. Dist LEXIS 3378 (Feb. 6, 2003) (manufacturer of vinyl wall covering installed in new building among parties sued for alleged mildew and leaks). An HVAC contractors' perspective on mold issues is found in Joint Hearing supra note 4 at 116-119 (Prepared Statement of Jim Hussey, Chairman, The Air Conditioning Contractors of America).

[FN402]. Of course, the general contractor is likely to in turn allocate such liabilities to the appropriate subcontractors.

[FN403]. The project owner or developer will often be the other relevant party.

[FN404]. A recent article notes:

"Whether owners will accept specific riders that allocate the risk of mold conditions remains to be seen, but such riders could be included in contract negotiation discussions with the owner."

Dreste supra note 50 at 18. The architect may prefer to use standard form contracts issued by the American Institute of Architects. See Anthony Granato, Architect Liability for Injury to Workers: Is There A Duty to Design A Building That's Safe to Construct, 21 Ohio W.V.L. Rev. 403 (1994). The architect may have contracts with both the project owner and contractors. Id. at 406-407. Likewise, the general contractor would probably prefer to use standard form construction agreements prepared by the Associated General Contractors ("AGC") of America. See Dreste supra note 50 at 14 (discussion of provisions in AGC agreements that may address mold issues).

[FN405]. The key provisions would include indemnities, releases warranties, etc.

[FN406]. This absence of coverage might pose an additional problem. The contractor may be required to carry coverage for such risks as a condition to being able to compete for certain projects.

[FN407]. The architect may actually perform a number of project tasks. An example of the services an architect agreed to provide in regards to the construction of a condominium complex is found in Aldrich v. Add, Inc., 437 Mass. 213, 770 E. 3d 417 (2002). The agreed services were to include: (1) review and evaluation of the project, including the preparation of schematic design documents illustrating the scale and relationship of project components; (2) refinement of the building and site design generated in the schematic design phase; (3) preparation of drawings and specifications for construction that fully complied with all applicable federal, state and local laws, ordinances and codes; and (4) administration of the construction contract between Dolphin and the contractor, including site inspection visits. Id. at 215. See also Granato supra note 382 at 405 (stating that even on projects where architects do not agree to supervise the construction, they agree to produce construction drawings and written specifications for the project). A description of the architect's role in the construction process is found in Kustin supra note 79 at 121-122.

[FN408]. A discussion of various structural material/design issues relevant to the minimization of indoor air pollution is found in Levin & Kevin Teichman, Indoor Air Quality - For Architects, 72 Progressive Architecture, March 1999 at 52.

[FN409]. See Heady supra note 73 at 1058 (contractors and designers must maintain a current understanding of available state of the art technology). One author notes that the architects' clients will demand "healthier" buildings.

[FN410]. These parties might be the architect, engineer, contractor/subcontractor, trades, etc. One author provides an example: "While architects are usually responsible for the coordination of work completed by HVAC system designers and may supervise the installation of such systems, liability for SBS resulting from an HVAC system design should be assigned to the consultant who designed the system, the technical functioning of HVAC systems is beyond the scope of control by architects."

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[FN411]. *Id.* at 245 (architects should not be held accountable for the failure to maintain building HVAC systems).

[FN412]. Architect liability issues are addressed in Constance Frisby Fair, Architect and Engineer Liability, 35 WASHBURN L.J. 32 (Fall 1995); Granato supra note 382 at 403; and Kustin supra note 79.

[FN413]. Cutlip v. Lucky Stores, Inc., 325 A.2d 432, 443 (Md. 1974).

[FN414]. *Id.* See also Kustin supra note 79 at 131 (referencing parties use of theories such as negligence, breach of contract, implied warranty and strict liability to hold architects and other building professionals liable for sick building syndrome).

[FN415]. This discussion does not address the ability of a unrelated party (from a contractual standpoint) to maintain a damage action against an architect. Liability has been imposed on architects in certain scenarios despite the absence of privity. Ales-Peratis Foods International, Inc. v. American Can Co., 209 Cal. Rptr. 917, 922 (1985); A.E. Investment Corp. v. Link Builders, Inc., 214 N.W.2d 764, 768 (Wis. 1974). The third parties' ability to seek damages will usually be dependent on a finding that it was foreseeable they would be injured by the structure design problem. Link Builders, 214 N.W.2d at 768. Privity issues are also addressed in Constance Frisby Fair, Architect and Engineer Liability, 35 WASHBURN L.J. 32 (Fall 1995).

[FN416]. For example, see L.L. Bean, Inc. v. United States Mineral Products Company, et al., No. CV-98-632, 1991 Me. Super. LEXIS 323 (Dec. 3, 1993) (architectural firm sued for negligence and breach of contract when mold found in building fireproofing material).

[FN417]. Travelers Indemnity Co. v. Ewing, Cole, Erdman, & Eubank, 711 F.2d 14, 17 (3d Cir. 1983); Mounds View v. Walijarvi, 263 N.W.2d 420, 424 (Min. 1978) (an architect has the duty to "exercise such care, skill and diligence as men in that profession ordinarily exercise under like circumstances."). See also Fair supra note 390 at 35; Granato supra note 382 at 405.

[FN418]. Paxton v. County of Alameda, 259 P.2d 934, 939 (Cal. Ct. App. 1953).

[FN419]. Cooper v. Jevne, 128 Cal. Rptr. 724, 729 (1976).

[FN420]. Centex-Rooney Construction Co. v. Martin County, 706 So. 2d 20, 23 (Fla. Dist. Ct. App. 1997).

[FN421]. *Id.* at 23.

[FN422]. *Id.* When the courthouse was demolished, two "highly unusual toxic molds" were found. *Id.* at 25. Over sixty percent of the exterior walls had mold on them. *Id.* at 24.

[FN423]. *Id.* at 24.

[FN424]. *Id.* The county alleged that the building windows were installed improperly, which resulted in much of the mold growth. *Id.* at 25.

[FN425]. *Id.* at 24.

[FN426]. *Id.* at 28.

[FN427]. Bloomburg Mills, Inc. v. Sordoni Construction Co., Inc., 164 A.2d 201 (Pa. 1960).

[FN428]. *Id.*

[FN429]. *Id.* The plaintiff operated a rayon and nylon weaving mill and the moisture aggravated the weaving process.

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[FN430]. *Id.* at 203.

[FN431]. *Id.*

[FN432]. *Id.*

[FN433]. *New Mexico v. Gathman-Matotan Architects and Planners, Inc.*, 653 P.2d 166, 169 (N.M. Ct. App. 1982); *Mounds View v. Walijarvi*, 263 N.W.2d 420, 423 (Minn. 1978).

[FN434]. *Mounds View*, 263 N.W.2d at 423 (citing *Coombs v. Beede*, 36 A. 104 (Me. 1896)).

[FN435]. *Mounds View*, 263 N.W.2d at 424; *Gathman-Matotan*, 653 P.2d at 169. The court compares architects to other professionals, such as doctors and lawyers.

[FN436]. *Id.*

[FN437]. *Mounds View*, 263 N.W.2d at 423 (citing *Coombs v. Beede*, 36A. 104 (Me. 1896)); *Gathman-Matotan*, 653 P.2d at 169. One court goes so far as to say that the concept of implied warranty only applies to goods and never to services.

[FN438]. See generally Fair *supra* note 390 at 35-36.

[FN439]. *Bednarski v. Cutler Hammer Corp.*, 711 F. Supp. 823, 826 (M.D. Penn. 1989); *Papp v. Rocky Mountain Oil & Minerals*, 769 P.2d 1249, 1255 (Mont. 1989). One court found that it was fair to impose strict liability on manufacturers who have plenty of time to find defects in their products before they are sold, but it is not fair to impose strict liability on an architect who only has one chance to design a defect-free structure. *Mounds View*, 263 N.W.2d at 425.

[FN440]. *Papp*, 236 Mont. at 339.

[FN441]. See, e.g., *Heller v. Cadral Corp.*, 406 N.E.2d 88, 89 (Ill. App. 1980).

[FN442]. *Bednarski*, 711 F. Supp. at 826; *Blagg v. Fred Hunt Company*, 272 Ark. 185, 190, 612 S.W.2d 321, 324 (1981).

[FN443]. *Blagg*, 272 Ark. at 190, 612 S.W.2d at 324.

[FN444]. *Sime v. Tvenge Associates Architects & Planners, P.C.*, 488 N.W.2d 606, 611 (N.D. 1992).

[FN445]. *New Mexico v. Gathman-Matotan Architects and Planners, Inc.*, 653 P.2d 166, 170 (N.M. Ct. App. 1982).

[FN446]. See, e.g., *Sime*, 48 N.W.2d at 611.

[FN447]. For example, see *New Orleans Assets, L.L.C. v. Carl E. Woodward, et al.*, No. 01-2171, 2003 U.S. Dist. LEXIS 3378 (Feb. 6, 2003) (parties sued by building owners for mildew and leaks in new structure include contractors).

[FN448]. A discussion of homebuilder involvement in mold litigation is found in *Bischoff* *supra* note 23.

[FN449]. See *Heady* *supra* note 73 at 1056-1057 (improperly designed or fitted HVAC system can contribute to poor indoor air quality).

[FN450]. *Dolnick* *supra* note 108 at 16 (prevention of mold growth requires a strong commitment to building in accordance with plans and specifications).

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[FN451]. See Mark E. Ruguet, *Mold Claims: Agents Options Limited*, National Underwriters, March 25, 2002 at 25 (noting that some contractor insurance policies contain mold-related exclusions for structures constructed with stucco-type finishes because of moisture retention issues).

[FN452]. Alternatively, one author asks whether the contractor could take a proactive role and seek the modifications to the project necessary to remedy such problems. Heady supra note 73 at 1058. Both the other project professionals and the owner would have to be convinced of the need for such changes. The President of the Associated General Contractors of America noted the necessity of securing concurrence by the design professionals: "Will architects and engineers be amenable to changes in design and building materials to lessen the chances of mold?" Larry C. Gaskins, *Don't Let Mold Make You Fold*, Contractor, March 2003 at 3.

[FN453]. The contractors would need to ensure the party had the means to cover this potential liability. For example, it would presumably be important to verify that a subcontractor assuming certain responsibilities has adequate insurance coverage. See Mark E. Ruguet, *Mold Claims: Agents' Options Limited*, National Underwriters, March 25, 2002 at 25.

[FN454]. A possible source of such information may be environmental assessments or audits of the structure that have already been generated by the project lender, purchaser or other parties.

[FN455]. A prudent contractor may therefore seek the disclosure of such information prior to the initiation of the project. The contractor might also, in lieu of such disclosures, require that the owner or other relevant party provide warranties regarding such matters. The parties might also ensure that these potential issues are addressed through the change in condition provisions of the construction contract.

[FN456]. See Heady supra note 73 at 1056 (noting excessive moisture and associated microbial contamination can be the result of improper drying during the construction process).

[FN457]. A risk manager for a subcontractor notes: "I personally recall one project manager in Northern California who despite the fact the roof had been left off the building through two very wet winters, was surprised that the installed sheet rock began turning green and black." Dolnick supra note 108 at 14.

[FN458]. Tulacz supra note 14 ("You can't begin installing interior finishing systems without enclosing the building, but sometimes you have to work carefully with the general contractor on scheduling to make this happen...").

[FN459]. For example, see Nadine N. Post, *Containing Noxious Mold*, 242 Engineering News - Record 17, May 3, 1999 at 32 ("Construction mistakes can be easily covered up only to rear their heads later in the form of mold growth. Consider this common scenario: The contractor, in a rush to avoid late penalties, installs mold friendly gypsum board before the building is enclosed. It rains, the board gets wet and doesn't dry before it is painted. Down the line there is a mold problem."). A related problem is the need to ensure that building materials stored on-site prior to use in construction are protected from rainfall. An author notes: "Another scenario: A board, fiberglass insulation or any porous material on site. It gets rained on and is installed that way and covered up. Down the line there is a mold problem." Id. See also Andrew J. Streifel, *A Holistic Approach to Indoor Air Quality in Health Care*, 70 Heating, Piping, Air Conditioning, No. 10, Oct. 1998 (contractor's failure to protect certain structural components during construction caused water damage that facilitated mold growth).

[FN460]. See *New Orleans, L.L.C. v. Carl E. Woodward, et al.*, No. 01- 2171, 2003 U.S. Dist. LEXIS 3381 (Feb. 6, 2003) (allegation that building subcontractor installed wet drywall in building causing mildew growth).

[FN461]. The education of project personnel has also been stated to be important in preventing the growth problem of mold during construction. Dreste supra note 50 at 14. Planning for the appropriate response to the discovery of mold during construction is also deemed important. Id.

[FN462]. See Joint Hearing supra note 4 at 55 (Prepared Statement of Gerald M. Howard, Executive Vice President, National Association of Home Builders) (noting that builders, trade contractors, and property owners and managers

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are being sued for property damage and personal injuries related to mold.)

[FN463]. The President of the Associated General Contractors of America noted: "Some projects for instance, will need to go up more slowly, to ensure proper drying and ventilation of all components. Will owners interested in avoiding tenant lawsuits be amenable to these delays?" Gaskins supra note 430 at 3. A recent article notes that the contractor may wish to include in the construction agreement a provision that shifts certain responsibilities or liabilities to the owner for damages that arise from the inability to undertake appropriate measures to protect the construction site because of an accelerated schedule. Dreeste supra note 50 at 16..

[FN464]. Hodgson, Russ, Andrews, Woods & Goodyear, LLP v. Isolatek International Corporation, 2002 N.Y. App. Div. LEXIS 13122 (2002) (mold discovered during renovation of two floors of a building).

[FN465]. Dolnick supra note 108 at 16 (noting construction project mold problems can cause delays).

[FN466]. Contractors should consider contract language that allocates risk for mold conditions to those entities in the best position to control the risk.

[FN467]. A 2003 article provides a detailed discussion of how the discovery of mold at a construction site might be addressed by certain form documents issued by the Associated General Contractors of America. Dreeste supra note 50 at 14. The discussion includes an assessment of whether mold fits within the defined term "Hazardous Materials" and the rights of the contractor to cease work if such defined substances are discovered at the construction site. Id. It also discusses how these form agreements allocate responsibility for any necessary testing/remediation. Id. Delay costs and indemnity obligations are also explained. Id.

[FN468]. A contractor pollution liability policy may be used by some contractors to address various pollutant events associated with construction activities. See Trader supra note 39 at 13 (the emergence of mold as an additional potential environmental exposure has been cited as additional inducement for contractors to procure Contractor Pollution Liability Coverage).

[FN469]. See Benjamin Dilello et al. v. Katnik Corporation, 2002 Cal App. Unpub. LEXIS 11814 (2002) (ninety percent of fault apportioned to contractor for alleged negligent construction that resulted in mold growth).

[FN470]. Examples include the seepage of water through doors, windows, roofs and curtain walls. The contractor's role in placing a structure addition into a flood zone has also been the subject of an action. See Booker v. New Homes, Inc., No. 04-02-0122-CV, 2003 Tex. App. LEXIS 254 (Jan. 15 2003) (allegation that construction defects allowed water seepage around doors and windows causing mold). See Heady supra note 73 at 1056; David Farnsworth, et al. v. Thomas M. Herrigan, No. CV 950373 9145, 1999 (Conn. Jan. 22, 1979).

[FN471]. For example, see Fosters v. Denton Independent School District et al., 735 W. 2d 454 (2003) (company that installed HVAC equipment among defendants in suit alleging mold related bodily injury).

[FN472]. Centex-Rooney Constr. Co., Inc. v. Martin County, Florida, 706 So. 2d 20, 25 (Fla. Ct. App. 1997) The county was able to prove that the breach of the construction management agreement was a proximate cause of the damages incurred. Id.

[FN473]. Id.

[FN474]. Wawak v. Stewart, 247 Ark. 1093, 1094, 449 S.W.2d 922, 923 (1970).

[FN475]. Id. at 1095, 449 S.W. 2d at 923.

[FN476]. Mondelli v. Kendell Homes Corp., 631 N.W.2d 846, 853 (Neb. 2001). Because the plaintiffs in Mondelli claimed and were able to establish a breach of the warranty to construct the home in a workmanlike manner, the decisions establishes an ability to sue under both contract and negligence theory.

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[FN477]. Theis v. Heuer, 280 N.E.2d 300, 306 (Ind. 1972) (citing Dean Prosser, The Law of Torts 693-95 (3d ed. 1964)).

[FN478]. McDonough v. Whalen, 313 N.E.2d 435, 439 (Mass. 1974).

[FN479]. 706 So. 2d 20 (Fla. Dist. Ct. App. 1997).

[FN480]. 631 N.W.2d 846 (Neb. 2001).

[FN481]. Id. at 851.

[FN482]. Id.

[FN483]. Id. The inside of the wall was covered with mud and toadstools.

[FN484]. Id.

[FN485]. Mondelli, 631 N.W.2d at 851-52.

[FN486]. Id. at 852. Later, Ms. Mondelli was diagnosed with asthma. Id. Her doctor stated that mold growth was a common cause of asthma. Id.

[FN487]. Id.

[FN488]. Id. Various standards and codes are applicable to the construction of facilities and structures. They may be promulgated by either governmental agencies or private organizations. Some are likely applicable to various conditions or activities that directly or indirectly facilitate mold growth.

[FN489]. Id. 862.

[FN490]. See Mondelli, 631 N.W.2d at 852; Centex-Rooney Construction Co. v. Martin County, 706 So. 2d 20, 25 (Fla. Dist. Ct. App. 1997). The injury affect someone who is not in privity with the contractor, as long as it is foreseeable that that person might be injured. Suneson v. Holloway Construction Company, 337 Ark. 571, 582, 992 S.W.2d 79 (1999).

[FN491]. Woodward v. Chirco Construction Co., 687 P.2d 1269, 1270 (Ariz. 1984).

[FN492]. Id.

[FN493]. Columbia Western Corp. v. Martinez, 592 P.2d 1294, 1299 (Ariz. Ct. App. 1979).

[FN494]. Cosmopolitan Homes, Inc. v. Weller, 663 P.2d 1041, 1045 (Colo. 1983).

[FN495]. Blagg v. Fred Hunt Company, 272 Ark. 185, 186-87, 612 S.W.2d 321, 322 (1981).

[FN496]. Ark. Code Ann. § 16-56-112(a). For example, Arkansas limits this time period to five years. The purpose of the statute of limitations is to protect members of the construction industry from being sued many years after they build a structure. See also Rogers v. Mallory, 328 Ark. 116, 120, 941 S.W.2d 421, 422 (1997).

[FN497]. Mondelli, 631 N.W.2d at 853.

[FN498]. Blagg, 272 Ark. at 188-89, 612 S.W.2d. at 323.

[FN499]. Alaskan Oil, Inc. v. Central Flying Service, Inc., 975 F.2d. 553, 554 (8th Cir. 1992).

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[FN500]. East River Steamship Corp. v. Transamerica Delaval, Inc., 476 U.S. 858, 868 (1981); Berkeley Pump Co. v. Reed-Joseph Land Co., 279 Ark. 384, 391, 653 S.W.2d 128, 131 (1983). In 1981, the Arkansas Supreme Court decided a case in which a homeowner sued a builder for strict liability. The plaintiffs began to smell strong odors and fumes from formaldehyde soon after they moved into their home. Blagg, 272 Ark. at 186, 612 S.W.2d at 322. They determined that the smell came from the carpet and its pad. Id., 612 S.W.2d at 322. The judge dismissed at trial the plaintiffs' claim of strict liability. On appeal, the court held that a house was a product for purposes of considering strict liability, and reversed the trial court's decision. Id. at 190, 612 S.W.2d at 324. In this case, the court found that a homebuilder could be held liable through strict liability for lack of workmanship if the plaintiff could prove that the house was unreasonably dangerous.

[FN501]. This discussion does not identify every potential risk management measure. For example, many real property market participants attempt to segregate potential liabilities associated with a structure or other facility in a separate legal entity provided by statute or common law. A key concern for a purchaser or developer of a particular property or facility is the likelihood that assets or funds may be put at risk beyond what is invested in the property or enterprise. See George W. Dent, Jr., Limited Liability in Environmental Law, 26 WAKE FOREST L. REV. 151, 165 (1991) ("Limited liability spreads risks among risk-averse participants: shareholders risk their investment while creditors shoulder the remaining risk."). A few of the available entities include corporations, limited partnerships, limited liability companies and limited liability partnerships. Various considerations apply to the choice of entity, including tax, organizational and other issues. The issue that is addressed is the ability of the entity to segregate the new enterprise's liabilities from the business or individual that established it. This concept is known as limited liability. The principle of limited liability shields an owner from responsibility for the debts (including debts arising from tortious conduct) of the company. The ability of various non-corporate entities to segregate liabilities is discussed in Emily A. Lackey, Comment, Piercing the Veil of Limited Liability in the Non-Corporate Setting, 55 ARK. L. REV. 553 (2002). See also Browning Ferris Indus. of Ill., Inc., v. Maat., 195 F.3d 953 (7th Cir. 1999). The Browning-Ferris court in discussing the rationale for limited liability noted:

That it is the principle of limited liability and it serves the important social purpose of encouraging investment by individuals who are risk averse and therefore will not invest (or will insist on a much higher return) in an enterprise if by doing so they expose their entire wealth to the hazards of litigation.

Id. at 959.

[FN502]. Other benefits of the assessment of environmental issues in the transactional context include: (1) ensuring environmental risks associated with the property are addressed in advance of the purchase and allocated under the contract; (2) timely incorporation of environmental risk allocation into the parties' business arrangement; (3) it establishes a baseline of information on current conditions of the property. See Steve L. Humphreys, Symposium: Earth, Wind and Fire: Brownfields in the Coming Millenium, 11 FORDHAM ENV'TL. LAW J. 799, 806-808 (2002).

[FN503]. For example, a purchaser may discover material concentrations of mold during the assessment of a structure. The seller may argue to eliminate prior to closing. The purchaser may find it prudent to confirm the success of the remediation prior to closing on the property.

[FN504]. Edward W. Carhon, Mold Litigation Continues to Grow, For the Defense, Aug. 2002 at 28 (stating a number of mold remediation personnel have entered the business with no experience).

[FN505]. Sweeney *supra* note 5 at 78 (noting the need to use a Certified Industrial Hygienist with experience in assessing mold).

[FN506]. There are presumably other reasons to use skilled contractors. For example, the removal of mold can expose the remediation personnel to potential health hazards for which protective measures should be undertaken in some circumstances.

[FN507]. For example, the Ohio Environmental Protection Agency certifies the professional's issuance of "no further action" environmental remediation letters as part of the states "brownfield" program. See Robertson *supra*

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note 184 at 48-64.

[FN508]. A description of the requirements to become "a certified professional" in the Ohio brownfield program is found in Robertson *supra* note 184 at 54-57. Colorado's brownfield program requires participants to use a "qualified professional". *Id.* at 58-60.

[FN509]. The New York City Department of Health & Mental Hygiene states that microscopic identification of the spores/colonies requires considerable expertise. It states that such services are not routinely available from commercial laboratories. *Id.*

[FN510]. The structure's HVAC and plumbing will also need to be addressed.

[FN511]. See Plainfield-Union Water Co. v. Comm'r, 39 T.C. 333, 338 (1962). Repairs are ordinary and necessary business expenses which may be deducted against current income. § § 162, 212.

[FN512]. See Plainfield-Union Water Co. v. Comm'r, 39 T.C. 333, 338 (1962). Improvements are capital expenditures which may only be recovered through depreciation deductions over the asset's useful life. § § 263, 167.

[FN513]. 1994-1 C.B. 35.

[FN514]. See Id. Revenue Ruling 94-38 held that costs incurred to clean up land and to treat groundwater that a taxpayer contaminated with hazardous waste from its business were deductible by the taxpayer as ordinary and necessary business expenses under § 162 of the Internal Revenue Code. See *Id.* This ruling does not address whether such expenditures would be deductible by the taxpayer if the property had been contaminated prior to the taxpayer's ownership.

[FN515]. See TAM 9240004.

[FN516]. See *Id.* The ruling stated that since the equipment was manufactured with asbestos, it was impossible to value the asset prior to the existence of asbestos or prior to the condition necessitating the expenditure. See *Id.*

[FN517]. 108 T.C. 265 (1997).

[FN518]. See Northwest, 108 T.C. 265, 285 (1997). Expenses incurred as part of a plan of rehabilitation or improvement must be capitalized even though the same expenses if incurred separately would be deductible as ordinary and necessary.

[FN519]. See Northwest, 108 T.C. 265, 284-285 (1997). The Tax Court stated that it did not find that the expenditures for asbestos removal materially increased the value of the building so as to require them to be capitalized. See *Id.* at 284.

[FN520]. See Title V: Tax Provisions, H.R. 5040, 107th Congress. The bill was introduced by Congressman John Conyers, Jr. from Michigan in 2002.

[FN521]. A deduction reduces the tax base. However, a credit reduces the tax liability as computed.

[FN522]. The credit will also be limited to the taxpayer's taxable income (i.e., this is not a refundable credit).

[FN523]. The full term is polychlorinated biphenyls.

[FN524]. An examination of the allocation of insurable risks commercial leases is found in Saltz *supra* note 54.

[FN525]. The identified concerns will become the operating basis for the parties' negotiations and dictate the form of contractual protections.

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[FN526]. Contractors should consider contract language that would allocate the risks for mold conditions to those entities in the best position to control the risk.

[FN527]. For example, when the real property market is increasing in value a potential purchaser may be more willing to accept various conditions. Jackson *supra* note 317 at 89.

[FN528]. Need to consider mold in documenting acquisitions, leases, loans, and other real estate transactions.

[FN529]. For example, a construction contract will allocate the insurance requirements among the contractor and subcontractors.

[FN530]. See Carla Liristis, et al. v. American Family Mutual Insurance Company, 1 CA-CV00-0539, 2002 Ariz. App. LEXIS 203 (June 27, 2002) (dispute as to whether homeowner's insurance policy covered certain damages associated with mold).

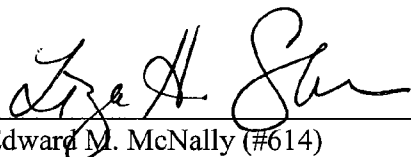
[FN531]. Relevant examples are the specialty policies developed to cover various environmental risks. See Ann M. Waeger & Jack Fersko, Current Insurance Products for Insuring Against Environment Risks, *The Practical Real Estate Lawyer* (Sept. 1999).

END OF DOCUMENT

CERTIFICATE OF SERVICE

I hereby certify that on September 28, 2005, I electronically filed the Substitute Compendium of Citations to Defendants' Opening Brief in Support of Its Motion *In Limine* to Exclude the Expert Report and Testimony of David J. Wilk with the Clerk of Court using CM/ECF which will send notification of such filing to the following:

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